

Notice of Allowability

Application No.

09/766,102

Examiner

Ronald Baum

Applicant(s)

THOMAS ET AL.

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/06/2006.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.


THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100


11/20/06

DETAILED ACTION

Examiner's Statement of Reasons for Allowance

1. Claims 1-16 are allowed over prior art.
2. This action is in reply to applicant's correspondence of 06 November 2006.
3. The following is an examiner's statement of reasons for the indication of allowable claimed subject matter.
4. As per claims 1, 10 and 14 generally, prior art of record, Mirov et al, U.S. Patent 6,138,236, fails to teach alone, or in combination, other than via hindsight, at the time of the invention, the features as discussed and remarked upon in the response of 11/6/2006 to office action of 5/24/2006.

Specifically, (as per claim 1, for example) prior art dealing with software code verification in general, and security insofar as protecting microcomputer system software code from malicious manipulation during power-up/boot sequence code execution more particularly, is generally known to exist per se, (i.e., Adelstein, F., et al, 'Detection of Malicious Boot Firmware', Annual Computer Security Applications Conference, 12/9/2002, entire document, <http://www.acsac.org/2002/papers/72.pdf>). Nowhere in the prior art is found collectively the *italicized* claim elements (i.e., the use of the identifier to generate the comparison code subsequently used for verification prior to memory storage access where the processing element and memory storage element are dedicated *exclusively* to each other for the memory access control function), at the *time of the invention*; serving to patentably distinguish the invention from said prior art (as contrasted against various memory/processor architectures per se, where the processing element is shared with other 'on-board' functional capability as part of a trusted platform (i.e., Walters, T., 'Enabling DRM in Embedded

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Devices', linuxdevices.com, Aug. 17, 2005, entire document, <http://linuxdevices.com/articles/AT3715099716.html>)

in the prior art);

“1. A method for *protecting a microcomputer system from manipulation of data stored in a storage arrangement* of the microcomputer system, the microcomputer system including a microcomputer allocated to the storage arrangement, comprising the steps of:

causing the microcomputer to

access the storage arrangement for processing the data; and

before the storage arrangement is accessed, performing the steps of:

assigning an individual identifier to one of

the allocated microcomputer and

the storage arrangement,

generating a comparison code and

storing the comparison code in the storage arrangement as a function of the

individual identifier, and

at a time that is one of before and during an operation of the microcomputer system,

generating a security code as a function of the individual identifier and

comparing

the security code with

the comparison code,

wherein the allocated microcomputer *accesses the storage arrangement only if*

the security code agrees with

the comparison code, and

wherein

the allocated microcomputer is assigned only to the storage arrangement and

the storage arrangement is assigned only to the microcomputer

so that

the assigned, allocated microcomputer and

the assigned storage arrangement can operate only with each other."

5. Dependent claims 2-9, 11-13 and 15-16 are allowable by virtue of their dependencies.

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Conclusion

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to Ronald Baum, whose telephone number is (571) 272-3861, and whose unofficial Fax number is (571) 273-3861 and unofficial email is Ronald.baum@uspto.gov. The examiner can normally be reached Monday through Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami, can be reached at (571) 272-4195. The Fax number for the organization where this application is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. For more information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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11/20/06

Ronald Baum

Patent Examiner

